

BULLETIN

of the

AMERICAN ROCK GARDEN SOCIETY

Vol. 7

September-October

No. 5

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Published by the American Rock Garden Society and entered in the United States Post Office at Bound Brook, New Jersey, as third class matter; sent free of charge to members of the American Rock Garden Society.

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Dorothy Ebel Hansell, Editor

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GOOD SHRUBS FOR ROCK GARDENS

P. J. VAN MELLE, POUGHKEEPSIE, NEW YORK

(A talk given by Mr. van Melle to the North Atlantic Region, February 16, 1949, at the Essex House, New York, N. Y.)

SINCE I am pinch-hitting on the subject scheduled as Shrubs for Rock Gardens, please permit me to treat it somewhat freely, with digression - and with a few suggestions of desirable plants rather than an exhaustive list of them.

Not all of my nominations will be found readily obtainable from nurseries. The days are gone when all you had to do to obtain your desiderata was to order them from your favorite nursery. Today, you must do without many of them or gird yourself for a job of plant hunting in the hinterlands of horticulture.

As far as woody plants are concerned - except a few groups, notably Azaleas - we live today in an era of greatly reduced available assortments. Today in rich America - of all times and places! - a sort of poverty has come upon us, unprecedented in the history of horticulture. Most of the things which were available some thirty-five years ago have disappeared from catalogs. There is today not nearly the diversity that prevailed seventy-five and a hundred years ago.

We cannot console ourselves by saying that we have fewer—but better things. Nor is the present paucity a mere matter of post-war shortages about to be replenished. It is, rather, the result of a trend long established in the nursery trade toward ever more limited diversity. This trend is fast changing the face of American gardens and landscapes. It proceeds, I think, from a desire on the part of large growers to steer the distribution of plants away from channels of unhampered competition into those of the controlled sale of proprietary items. Related and contributing factors have been the General Quarantine #37, the Plant Patent Act, and a ready concurrence with the trend on the part of schools whose difficulties of teaching "plant materials" are simplified by the elimination of most of the materials. The best hope of a reversal may well be in the development of an appropriate consumers' attitude on the part of gardeners' organizations.

Be all this as it may - it is plain enough that there has been a sorry depletion of our garden sylvia; a pauperization, in the course of which gardening people are ultimately to be deprived of their prerogative of choice, and restricted to short annual slates of patented specialities. Their attention is not to be turned aside from them by any considerable diversity of uncontrolled things. For every one patented item to date, dozens of older and mostly better things have gone into the discard. This is part and parcel of the over-all proposition of a controlled distribution; an artificial scarcity, not of plants, but of kinds. You are worse off today for plants than you are, for instance, for recorded music. You don't have to buy the juke-box stuff. You still have your choice of the classics. But in plants - particularly woody ones - the classics are fast going out.

Nowhere does the depletion come more clearly into view than in the current literature of plants. One cannot write of good plants today without meeting at once with a torrent of inquiries: "Where can they be bought?" Writers and editors are besieged with them. Let somebody, somewhere, mention *Berberis dictyophylla* and chances are that within two weeks I receive more inquiries for it than I can ever begin to answer.

From these reactions - of which editors are well aware - it would seem that there is today a substantial demand for things beyond the scope of most catalogs. Yet large growers say that they do not grow them because there is no demand for them. The surest way to kill off the demand is a continued refusal to grow and offer them. Thus, there comes into view what may look like a vicious circle but which is, in fact, a spiral, widening from this core; an intention to curtail the diversity of uncontrolled kinds in favor of controlled. Against it the enthusiasm of C. S.



Courtesy: D. Hill Nursery Company

Dwarf Japanese Juniper (*Juniperus procumbens nana*)

Sargent has not prevailed nor the introductions of E. H. Wilson. The effect of it all is not any increased output of plants but a more intensive exploitation - a grievous loss to horticulture of the best of plants.

For the present, until this maladjustment meets with whatever correction is in store, plantsfolk worthy of the name - gardeners who go for the best plants and who mean to preserve their prerogative of choice - find the going hard. They are learning that the best things are to be found today not along the highways, but along the byways of horticulture; that they must be hunted out at the price of some inconvenience. They are increasingly willing to do this and learning how. They are, in a sense, the salt of the gardening world. I reckon that there is a good deal of that salt in the American Rock Garden Society. Rock gardeners like diversity. They like distinctive plants - rare things rather than commonplace. They will not be led like sheep to the shearing, to the annual novelty counter.

To that frame of mind let me suggest here a few desirable items of woody plants, limiting myself to such as are hardy in my own Poughkeepsie climate, which

has much colder winters than New York City, Boston, and even Rochester, N. Y.

In some nurseries you may find, mostly in limited numbers, extremely dwarf Hemlock seedlings, such as occur occasionally in seedling stands. I would call them runt seedlings. Some years ago, John Swartley attempted to monograph the principal types of these seedlings then known to occur - a difficult task. New original seedlings continue to turn up and scarcely two of them are exactly alike. I doubt that there is available in nurseries today any appreciable stock of the clons distinguished by Swartley. Most of those you will find are original seedlings. I



Courtesy: Callicoon Nurseries

Dwarf Canada Hemlock (*Tsuga canadensis* var. *compacta*)



Courtesy: Henry Kohankie & Son

Dwarf form of Spruce (*Picea abies parviformis*)

suggest that you disregard their names and purchase such as you may chance to find for their degrees of dwarfness and for their looks. Cuttings of them grow too utterly slowly for practical purposes. Nor does grafting on common Hemlock understock work out quite satisfactorily. Though the vigorous stock and the dwarf cion may get along for a number of years, they do not seem to form good unions so that not rarely they pass out rather suddenly. I have at times seen some very interesting pieces of these dwarf Hemlocks at the Callicoon Nurseries, Callicoon, New York. If you should be traveling that way, you may want to stop and look at them.

Dwarf Yews of comparable interest may be found here and there where Yews are raised from seed. I do not know of any truly dwarf form of Yew available in the common marts of the nursery trade. The so-called dwarf Japanese Yew will reach immense proportions. I myself have played around for years with Yew seedlings and raised a number of interesting eccentrics. There is in the nursery today a remnant of dwarf plants most of which, fully twenty-five years old, are not over eighteen by twenty inches. These, and others that may be found elsewhere, would make fine rock garden pieces.

From long observation of dwarf Yew seedlings I conclude that, while some of them may seem to represent permanently dwarfed variants, they are, in fact, little else than cases of indefinitely protracted juvenile eccentricity, likely, at varying stages, of some ten to fifty years, to pass into the normal rate of growth and other normal qualities of their kind. The juvenile inhibitions may disappear quickly or, perchance, very gradually. If you desire to propagate the eccentric phase, it had best be done through cuttings of plants just old enough to display it. Such propagations, especially if taken from lower parts of the plant, would probably retain the eccentric characters more permanently than the original seedling plant.

This observation applies as well to the numerous dwarf forms of Spruces - mostly of the Norway Spruce (*Picea abies*) - that are available in some nurseries under varietal names. Many of them are eminently suited for rock gardens. Their names, I fear, are mostly unreliable. But disregard the names. Select the dwarf forms you can find under whatever names. A number of them are listed in the catalog of Henry Kohankie & Son, of Painesville, Ohio. By the way, this is a firm which has maintained for many years a more complete assortment of woody plants than any other in the eastern United States. When you are looking for an out-of-the-way item, don't give up until you have tried Kohankie.

Among the Pines, the nicest thing for rock gardens known to me is *Pinus strobus* var. *nanus* - an utterly dwarf, compact mass of grey White Pine foliage of

irregular form and indefinite width. Not many nurseries have it.

Among the upright growing Pines for occasional rock garden use, I suggest the Swiss Stone Pine (*Pinus cembra*) - a dense cylinder of greyish green foliage, slow growing and rarely seen hereabouts over eighteen or twenty feet high; and the Japanese White Pine (*Pinus parviflora*) - a reduced Japanese version of our native White Pine, markedly slender and of irregular outline in its youth. It broadens out ultimately and may be just the right note for a background or skyline effect. For a convenient source of supply, try Rosedale Nurseries, East View, New York, near the Hawthorne traffic circle.

One of my two favorite small Junipers for the rock garden is *J. procumbens nana* - a dense cushion of silvery gray needle foliage, of irregular, streaky outline, and something about the posture of its branches which reminds me of (pictures of) Siamese dancing girls. It's a honey. For sources of supply, you might inquire of the D. Hill Nursery Company, Dundee, Illinois, by which it was introduced into this country.

The other is a dwarf, compact, steel-grey form of our native *J. horizontalis*, available in some of the nearby nurseries, but never under any one, consistent name; sometimes as *J. horizontalis glauca*, sometimes as var. Bar Harbor, or as *J. horizontalis wiltoni*. Its habit differs from that of typical *horizontalis* in that the main branches follow very closely the contours of the environment, hugging the curves of a rock or growing perpendicularly down the side of a retaining wall. I never buy it anywhere by name. I nab it, when I see it, under any name.

Getting away from Conifers - have you tried the Korean Box? *Buxus microphylla koreana*, to be exact. I like it and have had a plant in my garden for twenty odd years unharmed by the worst of winters. I have it in a place open overhead, but heavily shaded by nearby trees. It does not seem to make a formal specimen plant like the familiar Boxwood, but rather a low spreading mat - the main limbs heavy and undulating outward, ultimating rooting where they rest upon the ground. A thing for a Boxwood ramble effect rather than for formal uses. Kohankie lists it. My old plant measures eighteen inches by three and a half feet.

I hesitate, in the presence of our President, to say much about Azaleas. He has done so much more scouting about them than I. I think that we might well explore the available forms of *Rhododendron indicum*, which seem to do well in suitable, favored locations in and around Poughkeepsie, where none of the brilliant forms and varieties of the Kurumes (*R. obtusum*), except the var. *kaempferi*, are



Forsythia viridissima bronxensis - one foot rule by comparison

reliably hardy. While I like none of the indicum forms with rose-colored flowers, the species, fortunately, runs strongly toward orange-rose and salmon-rose shades which I think are very attractive. The indicums form very neat, low, broad hummocks in the garden. They do not come into bloom with me until well into June. Perhaps because the flower buds do not reach any advanced stage of development before winter, they are usually not injured in winter. I suppose that many of you are familiar with the handsome double, orange-salmon flowered var. *balsaminaeflorum*. There is an excellent pure white flowered variety, Hakatashiro, and a highly interesting form with salmon-rose flowers that are split all the way down into petals that fall off separately. This is the variety Kimnazoi of Japanese catalogs and of some old American catalogs. I found it years ago in an old collection of odds and ends of Azaleas.

It seems that the species *obtusum* and *indicum* are very closely related. I suspect that among the things sold as Kurume (*obtusum*) forms there may be plants belonging to the hardies species, *indicum*.

Rhododendron mucronatum - the *Azalea indica alba* or *A. ledifolia alba* of former days - is, alas, not hardy enough for our Poughkeepsie climate. I wish it were. Many of us have seen its charms in the garden of Mr. and Mrs. Walter D. Blair, at Tarrytown, New York.

Among the so-called Catawbiense Hybrid Rhododendrons, I think that the variety Boule de Neige, of dwarf habit, with dark green foliage and pure white flowers, may well merit use in somewhat favored places in rock gardens. It is not a *catawbiense*, but a *caucasicum* hybrid. Unfortunately, I have not been able to obtain any plants of this hybrid among the considerable importations of Hybrid Rhododendrons from Holland in the last few years. It is hard to come by.

For a low, evergreen, quite woody groundcover in shade - best, it seems, by way of undergrowth - have you tried *Sarcococca hookeriana* var. *humilis*? It is a close relative of *Pachysandra*; forms a dense mat of lustrous, deep green foliage; spreads from woody rootstocks; and bears small, inconspicuous, highly scented flowers in earliest spring. It grows about twelve to fifteen inches high in my garden.

Have you made a note of the miniature *Forsythia bronxensis* which has lately been distributed, to some extent, by the New York Botanical Garden? If and when it becomes available in nurseries, it should prove an interesting and useful rock garden shrublet.

And so, with these few suggestions and such others as may arise in discussion, I wish you good plant hunting this spring.

Editor's Note: Other plants mentioned by Mr. van Melle casually, and during discussion, were: *Abelia grandiflora* - treated as a cut-back shrub; *Berberis verruculosa* and *B. gagnepaini*; *Cotoneaster adpressa*; *Daphne genkwa*; and *Juniperus squamata meyeri*.

WE FOLLOW A ROAD OF YESTERYEAR

ELOISE L. NELSON, ORICK, CALIFORNIA

MY husband and I had come across a map of the Illinois River Valley in southwestern Oregon. On it was shown an old road from O'Brien, Oregon, over Oregon Mountain - a road used many years ago by the stages which came over the mountains from Grant's Pass to Crescent City in northern California. Somehow it intrigued us, probably because it was marked "only for the hardy" and we filed it away as a "must try" against a day when we could say, "let's go there".

Finally, the day came when we had no plans and no work laid out that couldn't wait - a rare day in our household. Off we went with a pocket lunch, trowel, color camera and film.

Not far from the California border we stopped at Darlingtonia, where the Flytrap Plant, *Darlingtonia californica*, grows. It is supposed to grow only at this point and in one or two small patches in southern Oregon. I had previously asked about this plant in this little community and had not been successful in getting information. But we stopped at a nicely shrubbed home and service station, reasoning that the owners of such a place must like plants and might know where the Darlingtonia grew. The woman did and gave us excellent directions; then took us to an immense pool in which she had three fine clumps growing in the moist earth at the edge. They were in bloom - I had never hoped to see one in bloom. Certainly the flower bore no resemblance to the plant.

At first glance, it seemed to be four or five inches across, a reddish brown pointed cone with five broad petals and the back almost joined, tapering to a point at the end of the cone and fully two inches long. The five sepals are large and are a greenish yellow flecked with red; they're narrow and twisted and look like petals. The flower is solitary, borne on a bare slender stem twenty-four to thirty inches high and seems to nod and dance above the hollow leaves. These range in height from twenty to twenty-four inches, some copperish, some red. They look for all the world like copper, red or green cobra snakes stuck up in a circular arrangement with hoods of wierd transparency. Into these hollow leaves insects are attracted and held fast by the sticky substance inside the tube until the plant has digested them.

When we had hiked into the swamp - about a mile to the place where the plants grew - and had taken pictures of them, we felt that we had seen one of the plant oddities of the world. But we both had the feeling of something unnatural and unwholesome. The flower did not seem to belong to the plant which impressed us with its patient "waiting to spring" quality. I have never experienced such a feeling about a plant. Three times I reached down to dig a tiny one before I could force myself to do it. Surprisingly enough, *Darlingtonia californica* as a single plant in a pool is very effective.

All the way along the road to Oregon, *Azalea occidentalis* forms sheets of flowers and their spicy fragrance is intense. There are three lovely colors - a pale pink, a pale buff with a yellow rib and a deep rose which is very beautiful. The people here call them "Wild Honeysuckles", because of their fragrance which is really a cross between an intense Honeysuckle and Carnation. They pay no attention to them whatsoever, but rave over *Rhododendron californicum* which blooms at the same time and is not nearly as lovely as along Hoods Canal and the Olympic Highway in Washington.

At O'Brien, Oregon, my spouse informed me that I had better go in a store and inquire if anyone had ever heard of the old road. The storekeeper informed me that we were parked about twenty feet from where the road started, that it was thirty miles over the mountain, and that the road was not a whole lot different from when the stages used it. When I mentioned that we were interested in flower pictures, he told me that Rough and Ready State Park, about three miles along the highway, has many kinds of wild flowers. We decided to eat our lunch there and look around. It is an odd sort of state park with only an occasional tree - a long needle Pine and dense undergrowth of bush Ceanothus and chaparral about eighteen inches high. Scattered in the bare spots among these shrubs were Alliums, Brodiaeas and dwarf Cliff Brake Fern. The ground was carpeted with a prostrate Ceanothus filled with fat seed pods that made the plants look as though they were studded with huge rubies. This seems to be a different Ceanothus from the one

in northern California (*prostrata*) and is more robust, resembling a very healthy plant of creeping Penstemon rather than Ceanothus. Charming as it was in fruit, we would like to have seen the blooms. Here, too, were the dainty *Calochortus mauveanus*, or Pussy's Ears, and our beloved *Phlox diffusa* just through flowering. This seemed an odd grouping of lowland and upland plants; they all were growing out of a conglomerate rock or boulder with dirt washed in between.

We headed back and started up the stage road. Hardly were we off the highway before we were surrounded with sheets of yellow Iris. We had followed the pale *Iris chrysophylla* and the lovely *Iris tenax* for miles, and this was an abrupt change. For a second, we were confused, as the Iris was just about the height of a well-grown *I. innominata*, perhaps a little taller. However, the color was a soft sulphur-yellow with brown veining and the flower too robust for *innominata*. When I stopped to examine it, while the camera fan went about his hobby, I realized that it was *I. bracteata*, the Pine Iris. I should have known this, for the Pine was everywhere. That was the first time I had seen *I. bracteata* and it was lovely beyond description. Some of the older clumps carried as many as fifty flowers. In some the veining was brown, in others reddish brown.

Absorbed as I was in watching the plants as we rode by, I gradually became aware that another color had broken in; bright, clear rose-pink clumps were appearing with each turn of the wheels. We always argue for a while instead of doing the obvious; the head of the family insisted that it was a *Silene* which we had seen last year along the highway, and I said it was *Phlox*. So we stopped. He went for the camera and I for a book. I knew it didn't have the *Silene* calyx and he grudgingly guessed not. It proved to be *Phlox stansburyi*, a lovely thing about twelve to fifteen inches high, with large heads of rose-pink. I did not try for a plant, as it looked too difficult; I would rather collect seed and grow it than to destroy a single plant.

We were climbing now and imagine our amazement when, on rounding a turn into a little swale, we almost ran into a patch of *Darlingtonia* right on the road - this after we had walked two miles for it. Before the day was over, we decided that if it grows only in a few places, we must have struck them all. Along the old road we could have reached out of the car and touched at least four patches. About twenty yards off the road, we walked into one patch which measured at least fifty by two hundred feet.

Very soon we came upon patches of *Phlox diffusa*; then passed through the timber onto the open mountainside covered with small sharp rocks. On a rock slope, where a very dwarf fine-neededled Pine grows, we found *Xerophyllum tenax* or Squaw Grass in full bloom. My husband had previously taken pictures of it on his trips in the Olympic Mountains in Washington, but I had never seen the plant in flower. *Xerophyllum tenax* grows nearly everywhere in northern California, under trees or out on the slopes. The Indians use it in their basketry, as they do the stems of the Maidenhair Fern for the black designs. The "Hoopa" and Klamath and Weitchepc Indians here in northern California do some of the finest weaving I have ever seen.

In the open spots along the mountain, leathery looking, much divided, reddish green leaves were so odd as to attract our attention. Some looked like tiny leaves of the Tulip-tree, others were quite divided. After we had examined a space of fifty feet or more, we found a lovely yellow Violet attached to one of the plants. The leaf could have been anything, but no one would ever have suspected that it belonged to a Violet. The outside of the yellow petals of the flower was a soft velvety brown, the veining a red-brown; we later identified it as the Pine Violet or *Viola lobata*. We had found *V. cuneata* on the way to see *Darlingtonia californica*, a saucy little Violet, white with purple marks on its cheeks. The little flowers

seemed to peek up at us from the sprawling foliage like a tiny pixie. It had been hiding among *Iris tenax* and the yellow Arrowleaf Balsam-root. But the Pine Violet appeared to like an open spot by itself.

Not far from it, I found a tiny *Penstemon* in bud which I brought home and potted, until it blooms and can be checked. Here, too, was a tiny plant of what I hope some day will turn out to *Phlox speciosa*. We wanted to climb that hillside, it promised much, but it had been raining when we left home and here it was very hot. We had also heard odd rustlings at our approach and knowing that it was a rattlesnake country, we decided that low shoes, nylon stockings, the Siskiyous and rattlesnakes were not a good combination. We pushed ahead, promising to come back armed with boots and sticks. Now we are waiting not too patiently for the pictures to be developed, and are having duplicates of some made for the Society's collection.

The map is out again and our next trip planned - a three-day trip entering the Siskiyous in the direction of Oregon Caves but farther south in Oregon and over another old stage road through Happy Valley, Orleans, the Weitchepc Indian Reservation, crossing the Klamath River over an old hanging Bridge at Martins Ferry where the old guest house still stands and across the Bald Hills to Orick. This will take us to about 9,000 feet elevation - and as soon as the snow leaves so the road can be opened, we shall try it.

DWARF NARCISSI FOR THE ROCK GARDEN

DAVID WILKIE, EDINBURGH, SCOTLAND

THE genus *Narcissus* has been known for centuries and has always been one of the most popular with plant lovers. For nearly a century, nurserymen and amateurs have been hybridizing them to such an extent that there are now thousands of varieties and every spring sees a further addition to the number.

This artificial hybridization has been mainly with the large-flowered florists' section. The dwarf species, which are suitable for the rock garden, have been left more or less alone, with one or two exceptions. Hybrids are sometimes found in nature, but these are few.

The little species and their varieties are valuable for spring flowering in the rockery. They can be grown along the base of mounds or at the edge of steps; if they are placed on the mounds themselves, a summer or autumn flowering plant, such as a dwarf *Campanula* or an alpine *Phlox*, can be used as groundcover. It is in such a situation, or in an alpine meadow, that they are seen at their best, and there is little doubt that they derive some benefit from the association.

The complaint is frequently heard that the leaves of Daffodils look untidy, and that is very true of the large types. But the leaves of the dwarf species are so very small and narrow that they are almost unnoticeable.

The successful cultivation of the dwarf Narcissi requires nothing out of the ordinary - good garden soil, well drained, and ample moisture during the growing season. From the point of view of frost, they appear perfectly hardy, all of them coming through severe winters. Most of those cited in the following notes are natives of south and southwest Europe; there are, of course, a great many others, all beautiful and well worth growing. But it is the writer's intention to mention only those which can be procured at reasonable cost, also only those whose height does not, as a rule, exceed twelve inches.

One of the earliest to come into flower is the tiny *Narcissus minor minimus*, a perfectly shaped Daffodil with primrose-yellow segments and deep yellow trumpet with neatly frilled edges. The stems reach a height of three to four inches and

overtop the pale glaucous leaves. Occasionally, *N. minor minimus* is in bloom as early as February; but if the winter has been hard, it rushes up as soon as the weather freshens.

Similar to this is the species *N. minor*, but coming into flower a fortnight later and having larger blooms on six to eight-inch stems. A species is often listed in catalogs under the name of *N. nanus*, but as far as can be ascertained, this is none other than *N. minor*.

A taller Daffodil is *N. moschatus*. This reaches ten or twelve inches in height and has a larger, pale sulphur-yellow flower which gradually fades till nearly white. Its delicate coloring is particularly attractive in the early months of the year.

In some cases, these tiny trumpet-flowered species have been used as parents in hybridizing with *N. cyclamineus*, the Cyclamen-flowered Daffodil, and two or three of the resultant hybrids are offered in catalogs. They are undoubtedly lovely plants, bearing narrower trumpets than the usual trumpet Daffodil and having only slightly reflexed segments, not wholly reflexed as in *N. cyclamineus*.

The other species which has been crossed with the true trumpet Daffodil is *N. triandrus*, the Angels-tear Daffodil. This has produced a number of very lovely hybrids, many of which are primrose-yellow, while others are pure white. It is of this parentage that *N. johnstoni* var. Queen of Spain is said to be, although other authorities differ in their opinions. Whatever its parentage, it is a lovely little clear yellow trumpet, narrow in shape and with somewhat narrow, slightly reflexed segments of a similar shade.

Mention might be made of another hybrid which is suitable for the rock garden or alpine house. This is W. B. Milner, a small trumpet flower of very pale creamy yellow which, if grown outdoors, is nearly white.

Narcissus triandrus and its varieties are quite distinct from all the other species in the shape of the corona or crown; it is more globular or goblet-shaped.

There appears to be a great deal of confusion in the trade regarding the correct name of the form so commonly seen. Some call it var. *albus*, while others maintain that it is the type; in any case, it is a beautiful plant. The flowers, which are pendulous, are a pale creamy white and are produced in twos or threes on six to eight-inch stems. Often other varieties of the species are offered by the trade, such as *pulchellus* and *calathinus*. The former has primrose-yellow segments and a white crown, while the latter has larger white flowers, and the crown is longer than the type. The latter characteristic is so distinct that the plant is occasionally classed as a separate species.

The most attractive of all the dwarf Narcissi is *N. cyclamineus*, in which the flowers are pendulous, the trumpet narrow and more tubular, and the segments completely reflexed. Coming into flower in March or April, the flowering stems may measure only three or four inches; as the flowering period advances, the stems elongate to six or eight inches. Both the trumpet and the segments are a buttercup-yellow.

Narcissus bulbocodium, the Hoop-petticoat Daffodil, has a very large, wide-mouthed, trumpet-shaped corona and very narrow segments. The type grows upwards to about nine inches, with narrow rush-like leaves. The color of the flowers is a creamy yellow.

In the variety *citrinus*, the flowers are citron-yellow and in the variety *conspicuus*, they are a deeper shade. There is also a variety known as *romeuxi* which flowers earlier; it is of shorter stature and has bright yellow flowers. However, the white variety *monophyllus* attracts the greatest admiration. The pure white



Narcissus triandrus albus

flower is almost as large as that of the others, but is produced on a four-inch stem.

Narcissus juncifolius and the variety *rupicola* have small cups, the margins of which are usually waved. The flowers measure about three quarters of an inch across and are borne on six to eight-inch stems. *Rupicola* has practically stalkless flowers and is a bright yellow throughout, with lobed corona. In the type, the cup is of a deeper tone than the perianth.

Last but not least are the Jonquils with their many varieties and hybrids. It is their perfume which is so pleasing - but apart from this, they are charming. *Narcissus jonquilla* has stems of about twelve inches, carrying five flowers to a stem. These have segments of a buttercup-yellow, while the cup is slightly deeper. Usually, this species come into bloom about the end of April, as do its varieties, such as major and minor.

There is also the Campernelle Jonquil and *N. odor* var. *rugulosus*; both are sweetly scented and have paler segments and slightly deeper colored, fluted cups.

Admittedly these dwarfs do not make the display that the large varieties do - but they have a beauty all their own and should be more frequently seen in rock gardens.

ROCK GARDENING IN NEBRASKA

ANN TEGTMEIER, OMAHA, NEBRASKA

ROCK gardening is becoming increasingly popular in Nebraska. Natural limestone is found in abundance in many parts of the state; therefore, it is not too expensive for the average man's pocketbook, since transportation is not excessive. The time is rapidly passing when every home owner seemed to pile up all his refuse and cover it with clay from a basement, stick in a few vacation souvenir rocks, some Sedums, a few Cacti, and call it a rock garden. Planned gardening with rocks, with special attention to the needs of the plants, is taking place. No longer do the rocks stick out like sore thumbs, but are placed to simulate nature as closely as possible. The rock garden is situated on a natural slope or bank whenever possible; no more miniature alps spring up from the middle of the lawn.

It is possible to grow rock plants without rocks, but most of them will not be at home without drainage. Either they will ramp all over the place in rich level beds that would provide good perennial borders, thereby losing their charm as miniatures, or else the moisture and extra fertility around roots and crowns will rot them in summer or winter.

In eastern Nebraska, an excess of moisture is usually more of a problem with the more difficult varieties, rather than any lack of it. Many days (and nights) are hot and humid, favoring the growth of bacteria and fungi. Heavy rains in spring or fall may play havoc with a freshly made or poorly constructed rock garden. Sometimes the garden may be covered all winter with snow, and there will be no standing pools of water to rot fleshy plants - but this is not always the rule. Alternate freezing and thawing, coupled with extreme cold and no snow can cause trouble with some plants. This is particularly true of those plants which have evergreen foliage. Another provoking experience is to have a cherished plant come through the winter with flying colors, only to pine away and die in March or early April.

So much for the disadvantages of rock gardening. There are far more pleasures than disappointments which may be experienced in this type of planting, if a little forethought is exercised. First, we must decide what kind of rock plants we wish to grow. While there are a number of gardens in this area that do successfully grow acid soil plants, it is not easily done. Our loess soil is essentially alkaline and must be carefully prepared with acid peat, Pine needles or Oak leafmold. After it is once prepared, it must be kept in that condition with frequent applications of aluminum sulphate, water from apple peelings or rusty nails.

Another waste of time and money is the attempt to grow plants labeled "scree" or "moraine" in the ordinary soil found in most rock gardens. These plants naturally grow in beds of glacially ground rock or in crevasses where there is almost no soil. The tiny rootlets may search for several feet until they come in contact with cool, damp soil. No matter how well drained a rock bank may be, unless there are several inches (or feet) of rock covering the soil, it will be hot and dry during the summer. Extreme summer heat will kill off most of the scree plants in regular garden soil, and those which are left will depart if their collars are allowed to become wet and soggy during winter. Many of these plants are covered with deep snow for eight or nine months of the year in their native haunts, and the run-off is absorbed by the rock debris underneath them, so that at no time is there excessive water about the leaves, however wet the roots may be. The greyer and more hairy a plant may be, the more it dislikes moistures on its leaves.

Alpine gardening seems to have become synonymous with rock gardening, and sounds a little more refined to many people. Any small plant which is not too ambitious and has attractive foliage or flowers may make an acceptable rock plant, but

alpine plants are those which are found naturally above timber line on a high mountain. The altitude may vary several thousand feet as we move north or south, but the climatic conditions are much the same, whether it is in Mexico or Alaska. When these same plants are transported to our low country, where the altitude may be as little as one thousand feet, other factors must take the place of the high, thin air, brilliant hot days for a few weeks, and cold dewy nights.

Plants which will grow in full sun on the mountainside, need some protection from our noonday sun, since our summers are much longer and the air humid much of the time. This may be arranged by planting in a scree if perfect drainage is required, or on the north side of a good-sized rock for moor or meadow plants. The rock will absorb much of the heat during the day and return it slowly to the roots during the night. Where nights are cool in the mountains, this is a distinct advantage; but where the temperature may remain in the eighties all night long, a cooling spray with the hose will reduce the temperature after sunset. It has another advantage, that of simulating the mountain showers and dews.

The beginning rock gardener usually goes to one of two extremes; either he fills his space with rampant Sedums and too many plants which in time will grow too large, or he tries to grow the difficult collector's items and becomes discouraged with his failures. He is too new at the business of making any plant grow, to savor the spice of conquering the elements to enjoy an occasional success with the more particular subjects. The seasoned rock gardener realizes the gamble he is undertaking, and each failure spurs him on to greater efforts; he studies that much harder to find where he has missed and tries to remedy the condition.

Among the long list of plants included in any good rock garden catalog, there are many which are neither too fussy nor inclined to take over the entire garden, which will do well in the midwest with a minimum of weed pulling and dressing with sand, peat or chips twice a year to fill in any cracks and hollows caused by erosion. This makes the rock garden an ideal hobby for the city gardener who may be a professional man or woman, factory worker, or busy housewife, with little time and space at her disposal. The space which will grow one Peony or Spiraea, which gives a great display for perhaps two weeks during the year and just takes up room the rest of the year, will accommodate several refined rock plants. These may be selected to give a maximum of interest throughout the entire year.

Among the better plants for this purpose is *Achillea argentea*, a grey-leaved plant with white flowers, and none of the fussiness of *A. tomentosa* nor the rampageousness of some of the Achilleas. The Aethionemas are pretty shrublets, many of them evergreen, with clusters of pink flowers in mid-spring. *Alyssum saxatile*, the old familiar Basket of Gold, is beautiful where space permits, but *A. argenteum* and *A. montanum* are a great deal more refined.

Anemone pulsatilla and *A. patens* are harbingers of spring which liven up the late March or early April garden. They often push up through the late snow, but each individual flower brings along its own fur coat, and if the weather is not just to its liking, it wraps up and sits down to wait for the sunshine. The silvery grey Antennarias are attractive in or out of bloom. The little flower heads resemble up-turned pussy's feet. *A. campestris*, *A. microphylla* and *A. neodioca* have toes of white and tan, while those of *A. dioica rosea* are a pleasing rose.

Many of the Aquilegias are too large for the rock garden, but *A. akitensis* and *A. alpina* are dwarf enough and not too fussy about shade and moisture. There are a number of Arabis which are easy and attractive in early spring. Everyone is familiar with *A. alpina*, the white Rock Cress. The variety *flore pleno* is no stranger to most of us, but a nice stand of *A. alpina rosea* looks as delicious as a strawberry ice cream soda. *A. suendermanni*, *A. sturii* and *A. procurrens* are all of

somewhat similar form; unless you are a collector, you may not care for more than one. The small pointed rosettas are evergreen and not fussy like those of *A. alpina* and its varieties. The flowers are white and borne in clusters on thin stems well above the foliage. *A. kellereri* forms a mat of pointed, hairy foliage scarcely one half inch high. The tiny clusters of white flowers are carried on two-inch stems.

One of the most attractive plants in my garden is *Artemisia* Silver Dome. It is a sport of *A. frigida*, but forms a mound like half of a silver ball. It never needs clipping and invariably catches the eye, regardless of how many brilliant flowered plants may be about.

A number of the plants are tough but not too ambitious; among these are *C. carpatica*, *C. garganica* and *C. rotundifolia*. Any Campanula tends to fatten with a civilized diet, so they should have the leanest soil and a minimum of moisture. *Cerastium tomentosum* is a gray-leaved plant which bears scores of white flowers, but it requires confining.

Almost any species of *Dianthus* will reward with color and fragrance throughout a large part of the summer, and with clumps of evergreen foliage in winter. *Draba repens* is not at all fussy and the tiny cloud of yellow flowers on four-inch stems fairly hides the half-inch green mat to give the first splash of yellow in the rock garden. *Geranium sanguineum lancastris* may be rejected by some because it is near magenta in color, but it is dependable and blooms throughout the summer.

Wherever room permits a plant of *Gypsophila* Rosy Veil cascading over a ledge is a beautiful sight. *G. fratensis* forms a mat one half inch high with single pink flowers, but it is a great deal more particular as to drainage and soil.

A rock garden would not be worthy of the name without a number of the creeping *Phlox*. Pure whites, pinks, lavenders and even a deep rosy red may be had in *P. subulata*. In addition, *P. divaricata* and variety *alba*, *P. pilosa* and *P. amoena* are easy and different. The tiny *Potentillas* add interest and one of the best is *P. verna nana*, never more than one inch high. Each sunshiny day brings forth a new crop of bright yellow flowers like tiny Roses. *P. tonguei* has flowers of an apricot color, while *P. nevadensis* and *P. villosa* combine light yellow flowers with gray foliage.

An old favorite which may need some restraining, is *Saponaria ocymoides* in pink or white. Almost any of the *Sempervivums*, except the tiny webbed ones, will flourish in a rock wall if given some winter shade. Many of the *Sedums* are too weedy for a small space, but there are others which come up year after year and do not increase even as much as we should like to have them. Among them are *S. brevifolium*, a tiny plant with white beads for leaves, *S. spathulifolium* and its varieties with wedgeshaped leaves, and *S. hayesi*, a tiny mat of blue. Deciduous species of similar habit are *S. caucolicum*, *S. sieboldi*, and *S. tartarinowi*. The leaves are edged with color and the purple flowers add to the late garden.

Almost any of the *Thymes* and encrusted *Saxifrages* will contribute all-year interest and many of the *Veronicas* are practically "must haves". *V. armena*, *V. pectinata* and var. *rosea*, Blue Shimmer, *V. chamedrys* and *V. guthrieana* all have large flowers with attractive and varied foliage. *V. incana* and *V. i. rosea* add gray foliage to their pretty spikes of flowers. Considerable confusion exists over the true names of the plants sold as *V. rupestris* and *V. repens*. You may order one and get the other - but the flowers are good. *V. trehani* carries its blue flowers over yellow foliage.

Dozens of other plants will prove satisfactory for the average rock gardener, but even a small number of the above-mentioned will repay a hundred-fold for the time and expense involved.

CLAIRE NORTON'S NOTEBOOK

Minor spring bulbs are particularly lovely when planted among creeping perennials close to vertical rock faces and are ideal among ferns and dwarf shrubs and evergreens, which are found in a well-planned rock garden. The Guinea-hen Flower, Leucojums, Snowdrops, Grape-Hyacinths, *Brodiaea uniflora violacea*, and the Squills are adapted to such plantings. So are the dainty Narcissi - *NN. minimus, minor, cyclamineus, jonquilla, bulbocodium* and *triandrus albus*.

Grape-Hyacinths and *Phlox subulata* in pink dancing up and down a flight of informal steps in a rock garden - an enticing picture.

Another pretty combination for early spring - blue Forget-me-nots and tiny yellow Violas.

Shooting Stars (*Dodecatheon*) have been popular in gardens for many, many years and our native species are among the best of the genus. *D. multiflorum* is the most easily grown of the several Rocky Mountain species and produces showy



Courtesy: Walter A. Kolaga

Sempervivum arachnoideum

flowers of brightest rose. *Dodecatheon pauciflorum* has been aptly described as a "perky miniature pink Cyclamen family on one stem".

A whole family of Houseleeks peeping shyly out of a natural depression in a rock garden makes an appealing sight, especially when *Sempervivum arachnoideum* is used.

Corydalis aurea is one of the really charming plants for rock garden or dry wall. I have also seen it used about a pool and its "dainty filigree of iridescent gray" almost touching the water was very effective.

Arkwright Ruby is a striking *Viola*, ruffling its petals a bit, and painting them in ruby-crimson shading through terra cotta, then adding a sweet fragrance.

An interesting and rare plant, with which I have recently made acquaintance, is *Hibiscus trionum*, known as Trailing Hollyhock. Neither the plant nor the flower bears much resemblance to a Hollyhock and the common name seems misleading. In coloring and form the flower, to my mind, looks far more like that of the Mariposa Lily. It is large and ivory tinted, violet patched at the base and golden anthered. The plant is an annual, half procumbent and bushy, spreading in habit.

When early flowering perennials, such as Snow-in-Summer, Aubrieta and the like have finished blooming, shear them back for the sake of garden neatness. But don't throw away the clippings; tips of the new growth inserted in a bed of clean sand and covered over with glass until roots are formed, will yield new plants for setting out.

A Lupine for the rock garden is certainly of value. And when the plant has the beauty of the four-inch westerner, *Lupinus lyalli*, it deserves special mention. *L. lyalli* makes tufts of silvery foliage nestling close to the ground and crowns them with short racemes of bright blue flowers. It likes sunshine, but cannot stand the heat of the midday sun, so had better be planted where sheltered during this part of the day. Soil must be well drained and a collar of stone chips around the crown is recommended.

Heuchera sanguinea is taller than most subjects admitted to the small rock garden, but is slender and graceful enough to serve. Combined with Sea Pink (*Armeria*) it affords delightful bits of color for the larger rock garden.

The best all-around soil for the deciduous *Lewisia*s is one composed of one half grit or finely crushed rock and the remainder of equal parts sandy loam and humus.

Claire Norton, La Porte, Colorado

GENTIANA LUTEA

CLARENCE L. HAY, NEWBURY, NEW HAMPSHIRE

ABOUT twelve years ago, I received from the West Coast three plants of *Gentiana lutea*. They were established in a rather moist spot in my rock garden and have grown to be large plants, but in all these years none of them gave any indication of flowering. At last, in June 1949, the center one produced a tower of bloom that was worth waiting for. Reginald Farrer, in the "ENGLISH ROCK GARDEN", describes the flowering spike as "a stalwart torch crowned with radiating sparks of sunlight in successive tiers".

While the plant in the Alps sometimes attains a height of nearly five feet, this particular immigrant has been dwarfed by New Hampshire conditions to a little over two feet; but since the whorls are close together, the effect is an almost solid mass of brilliant primrose-yellow.

The Yellow Gentian is the one most widely used in medicine, the bitter root of which is ground up to serve as a remedy for many a human ill. I cannot vouch for the efficacy of the drug, but were we to accept a fraction of the claims, no household medicine chest or first-aid kit should be without it.

These claims are set forth in "A MODERN HERBAL" by Mrs. M. Grieve,

(Continued on page 88)

DAY IS DONE

A day is done when we may hear via the telephone a warm robust voice calling "Good morning, my friend" or looking out the window after breakfast see a tall sparse figure, clad in colorful tweeds, examining the plants in the garden, considering seriously their health and placing. That was Mr. Effinger Lear Reber.

Though not the oldest in his family, he was definitely the head of his clan and extended this patron feeling to the friends he gathered about himself in the course of the years; and not only to those but to others with whom he came in daily contact - his hired man, for example, who wandered off on many a spree and had to be sought and brought home! He had a particularly human and humane tactfulness that made his companion feel important and interesting. I have seen my small granddaughter succumb completely to this treatment as well as old people and those of his own age. One little incident - Mr. Reber took over the care of some ruffled-legged bantams for the small Barbara. For years after, he brought her delightful messages and eggs for her breakfast from her erstwhile charges. He was compassionate and understanding because he had the unusual faculty of putting himself in another's place - most of us essay the reverse with ill effects.

My assignment was to write something about what Mr. Reber meant to the Rock Garden Society here in the northwest. It is difficult - I seem to keep thinking about Mr. Reber the person, our friend. He was our first regional chairman and continued to hold that post for many years. There was something gay and spontaneous about that period - largely due to his sense of humor and his own good humor in engineering our activities; in part because we were all younger and the war clouds had not yet confused and dimmed our view.

We all realized that Mr. Reber was one of the very few in this region to have a real rock garden, which was just one phase of his large grounds. The rock garden was a beautiful spot and looked as if it had been transported from some high peak - a scree to one side and a small singing stream dropping through it, gathering into small pools along its course. The plants were true alpiners for the most part and the whole area maintained this characteristic. This portion of the gardens sloped to the west and in the near distance were the waters of Puget Sound and beyond the Olympic Mountains, a majestic and enchanting scene.

Mr. Reber did not easily throw a plant into discard. He could see the dwarf Conifers growing out of scale and taller ones obscuring his view, but he was unable to give the word to have them removed. And when he was compelled to open up his woods to get his great plantations of Rhododendrons into bloom, it was a painful business.

Mr. Reber was born in Pennsylvania and came west as a tall lanky youth. The fact that he landed himself a job as a cub reporter while on the train bespeaks his engaging qualities. I do not know how long he owned his home and grounds, but it was a long time, for in early days he commuted halfway to Seattle by horse and buggy and the rest of the way by "interurban".

As newspaper man and city editor of the Seattle Post-Intelligencer, his activities had wide ramifications that touched at many points the young and lusty Seattle, gateway to the Orient and stepping-off place for the Alaska "gold rush". Later, he and his good friend James Wood published the Town Crier, a weekly paper, and together owned and operated the Western Printing Co., a deluxe advertising and printing establishment. Mr. Reber was one of the founders of the Press Club

and was to have been specially honored at its Golden Jubilee celebration on June 24. He was one of the leaders of the University of Washington Arboretum Foundation and gave generously of time and wisdom to bring it along to what it is now.

His last day was one of sunny golden hours. He had stopped at his office for a few moments in the morning but was hurrying home - he had a man coming to help in his garden!

After carrying his sister to safety from his burning home, he re-entered it and met his death there on June 9. Yes, a day is done. Something very nice has gone from today and tomorrow and become part of remembrance.

Else M. Frye, Seattle, Washington

GENTIANA LUTEA

(continued from page 86)

F.R.H.S., Harcourt Brace & Co., 1931. "Gentian is one of the most useful of our bitter vegetable tonics. It is specially useful in states of exhaustion from chronic disease and in all cases of general debility, weakness of the digestive organs and want of appetite. It is one of the best strengtheners of the human system, and is an excellent tonic to combine with a purgative to prevent its debilitating effects....It is of extreme value in jaundice.... Besides being unrivalled as a stomachic tonic, Gentian possesses febrifuge, emmenagogue, anthelmintic and antiseptic properties and is also useful in hysteria, female weakness, etc."

A quotation from Nicholas Culpeper, a popular British herbalist of the seventeenth century, is worth noting: "Gentian comforts the heart and preserves it against faintings and swoonings; the powder of the dry roots helps the biting of mad dogs and venomous beasts....The herb steeped in wine, and the wine drank (sic) refreshes such as be over-weary with traveling and grow lame in their joints either by cold or evil lodgings; it helps stitches and griping pains in the sides: it is an excellent remedy for such as are bruised by falls....when kine are bitten in the udder by any venomous beast, do but stroke the place with the decoction of any of these and it will instantly heal them."

In conclusion, Mrs. Grieve says: "In the eighteenth century, Gentian wine was drunk as an aperitif before dinner...."

I regret that none of the seeds on my Gentian proved fertile, for I had hoped to contribute some to the Society's Seed Exchange.

SEED EXCHANGE

As previously announced in these columns, our Seed List will be distributed for 1950 with the January-February 1950 issue of THE BULLETIN. Members are requested to bear this in mind in forwarding their contributions to the Seed Exchange Director, Mr. H. Lincoln Foster, Coolwater, Norfolk, Conn.

The following requests for certain seeds have been received:

From Mr. T. G. Remick, Pine Hill, N. Y.: *Viola cornuta minor* (tiny, three-inch, everblooming), *Viola hederacea*, *Erigeron aureus*, *Bellis rotundifolia coerulescens*.

From Mrs. David M. Kydd, New Haven, Conn.: *Nierembergia rivularis*, *Mertensia virginica*.

From Dr. S. W. Schaefer, New York City: *Gentiana crinita*.

From Mrs. H. O. Thomas, Paterson, N. J.: *Epigaea repens*, *Helleborus*, any variety, *Cyclamen*, any hardy variety.

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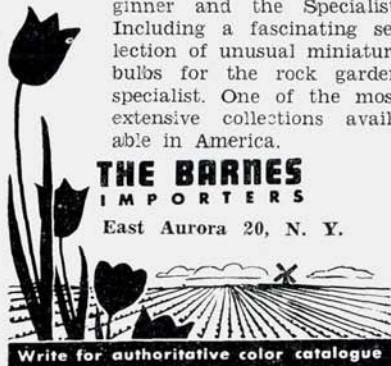
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